



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/709,483	11/13/2000	Oh-Nam Kwon	8733.307.00	4557

30827 7590 04/18/2002

LONG ALDRIDGE & NORMAN, LLP  
701 PENNSYLVANIA AVENUE N.W.  
SUITE 600  
WASHINGTON, DC 20004

EXAMINER

PHAM, THANH V

ART UNIT	PAPER NUMBER
----------	--------------

2823

DATE MAILED: 04/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

06

**Office Action Summary**

Application No.

09/709,483

Applicant(s)

KWON, OH-NAM

Examiner

Thanh V Pham

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 April 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

***Response to Arguments***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-2 and 11 are rejected under 35 U.S.C. 102(a) as being anticipated by Havemann et al. U.S. Patent No. 5,891,804.

Claims 4-5, 7-8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havemann et al. as applied to claims 1-2 and 11 above, and further in view of Senda et al. U.S. Patent No. 5,364,459.

Claims 3, 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havemann et al. and Senda et al. as applied to claims 1-2, 4-5, 7-8 and 10-11 above, and further in view of Charneski et al. U.S. Patent No. 6,284,652 B1 and/or Eriksson U.S. Patent No. 3,632,435.

Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havemann et al. and Senda et al. as applied to claims 1-2, 4-5, 7-8, 10 and 11 above, and further in view of JP 05-265040 and applicant's admitted prior art.

3. The rejection(s) is/are maintained as stated in the Office action mailed 1/11/02.

4. Applicant's arguments filed 4/10/02 have been fully considered but they are not persuasive. Applicant argues that layers 44/42/40/30/10 is not a substrate by pointing<sup>ing</sup> to Havemann et al. reference's column 3, lines 29-38. However, it is not so limited by the application itself; on page 2, line 14 and page 5, lines 21-22 and fig. 1 of the instant specification in which the upper and lower "substrates" is not just the substrate 1.

Layers 44/42/40/30/10 is considered as a 'prepared' substrate as mentioned in page 5 of the instant application. Moreover, applicant argues that none of the cited references teaches or suggests each and every element of the claim. For this particular 'substrate', Charneski et al. reference discloses in the starting step 50 of fig. 5 a substrate with copper-receiving surface, Senda et al. reference disclose disposing the as-formed plating film itself not only on a metal base material (col. 1, line 13) but also on a nonconductive base material of ceramic <sup>or</sup> plastic (col. 2, line 28).

### ***Conclusion***

**5. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh V Pham whose telephone number is 703-308-2543. The examiner can normally be reached on M-F (8:30-5:00).

Art Unit: 2823

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M. Fahmy can be reached on 703-308-4918. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 (7724, 3431 and 3432) for regular communications and 703-308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TvP  
April 12, 2002

  
George Fourson  
Primary Examiner  
2823